Comparisons of Job Characteristics

Focus Occupation: Computer and Information Systems Managers (11-3021)
Associated Occupation: Computer Systems Analysts (15-1051)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge — Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Computer and Information Systems Managers (11-3021)
Associated Occupation: Computer Systems Analysts (15-1051)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Computers and Electronics	8.4	19.3	20.0	0	Current knowledge level may be sufficient
Customer and Personal Service	11.3	15.4	15.7	0	Current knowledge level may be sufficient
Education and Training	9.2	13.2	7.8	<<	Extensive education and/or training may be required
Administration and Management	8.4	11.3	15.7	>>	Current knowledge level is likely more than sufficient
Engineering and Technology	5.7	11.0	6.6	<<	Extensive education and/or training may be required
Telecommunications	3.9	6.8	10.9	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills — Similarity of Focus Occupation to Associated Occupation: 72

Focus Occupation: Computer and Information Systems Managers (11-3021)
Associated Occupation: Computer Systems Analysts (15-1051)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Systems Evaluation	6.4	12.7	12.2	0	Current skill level may be sufficient
Active Learning	8.7	12.6	10.8	<	A higher skill level may be required
Systems Analysis	6.5	12.6	10.8	<	A higher skill level may be required
Operations Analysis	5.0	10.6	9.6	<	A higher skill level may be required
Quality Control Analysis	5.9	10.3	7.2	<<	Extensive development of skills in this area may be required

Programming	2.2	10.2	6.9	<<	Extensive development of skills in this area may be required
Technology Design	2.6	9.7	5.9	<<	Extensive development of skills in this area may be required
Troubleshooting	4.5	8.9	7.5	<	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities — Similarity of Focus Occupation to Associated Occupation: 97

Focus Occupation: Computer and Information Systems Managers (11-3021)
Associated Occupation: Computer Systems Analysts (15-1051)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Deductive Reasoning	10.6	13.9	13.2	0	Current ability level may be sufficient
Information Ordering	9.9	12.9	12.3	0	Current ability level may be sufficient
Fluency of Ideas	7.6	12.7	10.1	<	Some improvement in abilities may be required
Category Flexibility	9.0	11.8	10.2	<	Some improvement in abilities may be required
Originality	7.6	11.6	10.1	<	Some improvement in abilities may be required
Flexibility of Closure	7.8	10.4	8.2	<	Some improvement in abilities may be required
Mathematical Reasoning	6.3	10.3	7.7	<<	Extensive improvement in abilities may be required
Speed of Closure	5.9	8.8	6.9	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common — Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Computer and Information Systems Managers (11-3021)
Associated Occupation: Computer Systems Analysts (15-1051)

Work Activities	Exclusivity of Activity
Analyze workflow	89
Confer with management or users	76
Consult with customers concerning needs	69
Evaluate computer system user requests or requirements	81
Follow data security procedures	77
Follow data storage procedures	75
Recommend software or hardware purchases	85
Revise or correct errors in computer programs, software, or systems	85

Test computer programs or systems	78
Use computer application flow charts	84
Use computer programming language	82
Use project management techniques	47

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Computer and Information Systems Managers (11-3021)
Associated Occupation: Computer Systems Analysts (15-1051)

Tools and Technologies	Exclusivity
Business function specific software	1
Computers	1
Content authoring and editing software	1
Data management and query software	1
Development software	4
Finance accounting and enterprise resource planning ERP software	2
Industry specific software	1
Network applications software	1
Network management software	37
Networking software	21
Operating environment software	12
Security and protection software	30
Utility and device driver software	17

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.